

What is claimed is:

1. A composite reflector for a linear array of LEDs having a length, each of said LEDs having an optical axis extending from an area of light emission, said composite reflector comprising:

5 a row of substantially circular concave reflecting surfaces, each said concave reflecting surface substantially surrounding one said area of light emission and extending axially and outwardly to an upper edge; and

a pair of longitudinal reflecting surfaces extending axially and outwardly from lower limits adjacent said upper edges and laterally spaced apart by said row of substantially circular reflecting surfaces to define a trough axially thereabove.

2. The composite reflector of claim 1, wherein each said longitudinal reflecting surface comprises a plurality of longitudinally extending convex ribs.

3. The composite reflector of claim 1, wherein each said longitudinal reflecting surface comprises a plurality of longitudinally extending convex ribs arranged on a parabola projected along the length of said array.

4. The composite reflector of claim 1, wherein each said longitudinal reflecting surface comprises a plurality of longitudinally extending convex ribs, each said rib having a length and a different width.

5. The composite reflector of claim 1, wherein each said longitudinal reflecting surface comprises a plurality of longitudinally extending convex ribs, each said rib having a length and defined by a radius of curvature perpendicular to said length.

6. The composite reflector of claim 2, wherein the convex shape of each rib is defined by a different radius of curvature.

7. The composite reflector of claim 1, wherein each said substantially circular concave reflecting surfaces is defined by a parabola rotated about said optical axis.

5 8. The composite reflector of claim 7, wherein said parabola has a focus coincident with said area of light emission.

9. A warning light comprising:

an array of LEDs, each said LED comprising a die from which light
10 is emitted and a lens covering said die, said lens having an optical axis originating at said die, said LEDs being arranged along a line extending through said dies to form a linear LED array having a length; and

a reflector body having a back side defining a plurality of openings for receiving the lens of each LED and a front side defining a composite
15 reflecting surface comprising:

a row of concave reflecting surfaces, each said concave reflecting surface defined by a parabola having a focus coincident with the die of a received LED and rotated about the optical axis of the received LED, said reflector extending axially above said LED
20 to a rim having a diameter; and

a pair of longitudinal reflecting surfaces extending upwardly and outwardly from a lower edge substantially tangent to said rims, said longitudinal reflecting surfaces being laterally separated from each other by a distance substantially equal to the diameter of said rims, said pair of longitudinal reflecting surfaces extending
25 substantially the length of said linear LED array and defining a trough above said row of concave reflecting surfaces.

10. The warning light of claim 9, wherein each said longitudinal reflecting surface comprises a plurality of convex ribs.
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11. The warning light of claim 9, wherein each said longitudinal reflecting surface is a linear substantially parabolic surface defined by said parabola projected along the line extending through said dies.

12. The warning light of claim 9, wherein each said longitudinal reflecting surface comprises a plurality of convex ribs, each rib having a different width measured perpendicular to said array and along said reflecting surface.

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13. The warning light of claim 9, wherein each said longitudinal reflecting surface comprises a plurality of ribs with a convex surface defined by a different radius of curvature.

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